

REMARKS

Upon entry of the present amendment, claims 7-10 and 21-23 are pending in the instant application. Claims 7, 9 and 10 have been amended, and claims 21-23 have been added. Support for the claim amendments presented is found throughout the specification and in the claims as originally filed. For example, support for the amendments to claim 7 is found at least at page 3, lines 1-3; at page 18 in Table 4; and in claim 10 as originally filed. Support for the amendments to claims 9 and 10 is found at least at page 3, lines 1-3. Support for new claim 21 is found at least in Example 3 at page 24, lines 28-32. Support for new claims 22-23 is found at least at page 31, lines 16-19. Accordingly, no new matter has been added the amendments presented herein.

Objections to the Specification

The Examiner has indicated that the first line of the specification should be updated to include specific reference to the earlier filed application to which the instant application claims priority.

Applicant has amended the specification to include a specific reference to U.S. Patent Application Serial No. 09/042,225, filed March 13, 1998 and now issued as U.S. Patent Application 6,207,812. Accordingly, Applicant requests that the Examiner withdraw this objection.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 7-10 have been rejected under 35 U.S.C. § 112, second paragraph as being indefinite. According to the Examiner, these claims are “vague and indefinite for reciting the term ‘CSA’ in claim 7 and ‘CSA-1’ in claim 8 as the sole means for identifying the claimed molecules.” (Office Action, page 3).

Claims 7-10 have been amended. As suggested by the Examiner, the pending claims have been amended to identify the claimed CSA polypeptides by reference to the appropriate sequence identifier. For example, claim 7, as amended, is directed to an isolated chondrosarcoma associated (CSA) polypeptide that contains the amino acid sequence of SEQ ID NO:2. Applicant submits, therefore, that the amended claims are not vague or indefinite. Accordingly, this rejection should be withdrawn.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Enablement

Claims 8-10 have been rejected under 35 U.S.C. § 112, first paragraph for lack of enablement. According to the Examiner, “it would require undue experimentation for one of ordinary skill in the art to perm the method of the claim as broadly written.” (Office Action, page 12).

The pending claims have been amended. As amended, independent claim 7 recites an isolated chondrosarcoma associated (CSA) polypeptide that contains the amino acid sequence of SEQ ID NO:2. Amended independent claim 9 is directed to an isolated CSA polypeptide that contains an amino acid sequence that is at least 90% identical to the amino acid sequence of SEQ ID NO:2, wherein the polypeptide is differentially expressed in chondrosarcoma cells as compared to normal cartilage cells.

Applicant submits that a person of ordinary skill in the art, with the specification in hand and given the state of the art at the time of filing, could make and use the claimed CSA polypeptides without undue experimentation. The specification describes these CSA polypeptides in such a way as to enable one of ordinary skill in the art to make and use such molecules. (*See e.g.*, page 16, line 30 through page 17, line 25; Tables 3 and 4 on page 18; and Example 2 on page 24). Accordingly, Applicant requests that this rejection be withdrawn.

Written Description

Claims 7-9 have been rejected under 35 U.S.C. § 112, first paragraph for lack of written description. In particular, the Examiner has indicated that the claimed polypeptides and fragments were not “described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” (Office Action, page 12).

As described above, the pending claims have been amended. In particular, amended independent claim 7 is directed to an isolated CSA polypeptide that contains the amino acid sequence of SEQ ID NO:2. Furthermore, independent claim 9, as amended, recites an isolated CSA polypeptide that contains an amino acid sequence that is at least 90% identical to the amino

acid sequence of SEQ ID NO:2, wherein the polypeptide is differentially expressed in chondrosarcoma cells as compared to normal cartilage cells.

Applicants submits that the claimed polypeptide are fully described in the originally filed specification. For example, the claimed polypeptides and fragments are described throughout the specification as-filed, *e.g.*, at page 2, line 27 through page 3, line 3; and Table 4 on page 18). Moreover, as described above, methods of making the claimed polypeptides and fragments are described, for example, on page 16, line 30 through page 17, line 25; Tables 3 and 4 on page 18; and Example 2 on page 24.

Accordingly, Applicant therefore submits that the amended claims meet the statutory requirements for written description and respectfully requests withdrawal of this rejection.

Claim Rejections Under 35 U.S.C. § 102


Claim 7 has been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,744,343 by Draetta *et al.*, (“Draetta”) as evidenced by Nawa *et al.*, Intl. J. Cancer, vol. 69(2): 86-91) (“Nawa”) and Dobashi *et al.*, Diag. Mol. Path., vol. 2(4):257-63 (1993)) (“Dobashi”). According to the Examiner, Draetta describes the purified p53 protein, which is “known in the art [to be] differentially expressed in chondrosarcoma and normal cells as evidence by Nawa ... and Dobashi.” (Office Action, page 16).

Claim 7, as amended, recites an isolated CSA polypeptide that contains the amino acid sequence of SEQ ID NO:2. Neither Draetta, Nawa, nor Dobashi describes or a suggests a polypeptide that includes the amino acid sequence of SEQ ID NO:2 (shown in Table 4 on page 18 of the as-filed specification. Accordingly, amended claim 7 is novel over these references, and this rejection should be withdrawn.

CONCLUSION

On the basis of the foregoing amendments and remarks, Applicants respectfully submit that the pending claims are in condition for allowance. If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,


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